

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An injection device comprising an outer housing inside which is located:

a barrel for holding a volume of a medicament;

a needle at one end of the barrel, the needle and barrel being such that at least part of the needle is axially moveable in and out of the outer housing but is biased to be normally wholly inside the housing;

a plunger, axially moveable within the barrel;

an inner housing at least partially intermediate the outer housing and at least one of the barrel and plunger; and

an energy source in communication with the inner housing,

Characterized in that the inner housing is moveable by the energy source between three positions, namely:

a first position in which ~~the inner housing has~~ a plurality of radially flexible tags formed as part of the inner housing, ~~wherein one or more of the radially flexible tags is~~ are in communication with the barrel such that, in use, the plunger and the barrel are movable by the inner housing axially so as to move at least part of the needle out of the outer housing;

a second position in which one or more of the radially flexible tags formed as part of the inner housing is in communication with the plunger but not the barrel such that, in use, the plunger is movable axially into the barrel so as to expel medicament through the needle; and

a third position in which one or more of the radially flexible tags formed as part of the inner housing is in communication with neither the plunger nor the barrel such that, in use, the plunger and barrel are able to retract in order to retract the needle into the outer housing.

2. (Previously Presented) An injection device as claimed in claim 1 further comprising a spring housing intermediate the outer housing and the inner housing.

3. (Previously Presented) An injection device as claimed in claim 1 wherein one or more of the radially flexible tags is located at the end of a resiliently flexible leg.

4. (Previously Presented) An injection device as claimed in claim 1, wherein one or more of the radially flexible tags are rear tags that are situated at a rear end of the inner housing and are moveable radially into and out of communication with the plunger.

5. (Previously Presented) An injection device as claimed in claim 2, wherein in said second position the radially flexible tags are biased radially inwardly into communication with the plunger, preferably by communication with the spring housing.

6. (Previously Presented) An injection device as claimed in claim 1, wherein the radially flexible tags are stored in a relaxed condition, before initiating an injection.

7. (Previously Presented) An injection device as claimed in claim 4, wherein each rear tag is moveable out of communication with the plunger when aligned with a corresponding recess in a spring housing.

8. (Previously Presented) An injection device as claimed in claim 4, wherein each rear tag is substantially T-shaped.

9. (Previously Presented) An injection device as claimed in claim 1, wherein one or more of the radially flexible tags are forward tags that are situated at a forward end of the inner housing and are moveable radially into and out of communication with the barrel.

10. (Previously Presented) An injection device as claimed in claim 9 wherein the forward tags are biased radially inwardly into communication with the barrel, preferably by communication with a spring housing.

11. (Previously Presented) An injection device as claimed in claim 9, wherein the forward tags are stored in a relaxed condition, before initiating an injection.

12. (Previously Presented) An injection device as claimed in claim 9, wherein each forward tag is moveable out of communication with the barrel when aligned with a corresponding recess in the outer housing.

13. (Previously Presented) An injection device as claimed in claim 9, wherein each forward tag is substantially L-shaped.

14. (Previously Presented) An injection device as claimed in claim 1, wherein the energy source is a compressed gas.

15. (Previously Presented) An injection device as claimed in claim 1, wherein energy source is a spring.

16. (Previously Presented) An injection device as claimed in claim 1, further including means for allowing the inner housing to move axially only forward with respect to the outer housing.

17. (Previously Presented) An injection device as claimed in claim 16 wherein the means for allowing the inner housing to move axially only forward with respect to the outer housing is an arrangement of serrations, barbs, ratchet teeth or the like intermediate the housings.

18. (Previously Presented) An injection device as claimed in claim 1, further comprising guide means for guiding, in use, the relative axial movement of the spring and outer housings, the guide means preferably comprising one or more protrusions on the spring housing which, in use, cooperate with corresponding recesses on an interior surface of the outer housing.

19. (Previously Presented) An injection device as claimed in claim 1, wherein the needle is biased to be normally wholly inside the housing by means of a spring intermediate the barrel and the outer and/or spring housing.

20. (Previously Presented) An injection device as claimed in claim 1, wherein the needle is removable from the device.

21. (Previously Presented) An injection device as claimed in claim 1, wherein the needle, barrel and plunger are removable from the device.

22. (Previously Presented) An injection device as claimed in claim 1, further including a removable needle cover which protects the needle during storage before use.

23. (Previously Presented) An injection device as claimed in claim 22 wherein the needle cover includes means for pulling a protective rubber sheath from the needle when the needle cover is removed from the device.

24. (Previously Presented) An injection device as claimed in claim 23 wherein the pulling means includes a floating rivet intermediate the needle cover and the protective rubber sheath, whereby twisting forces applied to the needle cover are substantially prevented from being transmitted to the rubber sheath.

25. (Previously Presented) An injection device as claimed in claim 22, wherein the presence of the needle cover on the device serves as a safety lock, substantially preventing relative forward movement of the outer housing.

26. (Previously Presented) An injection device as claimed in claim 1, further comprising a viewing window in the barrel aligned with a viewing window in the outer housing such that the medicament can be viewed by a user prior to an injection taking place.

27. (Previously Presented) An injection device as claimed in claim 26 wherein, in use during an injection, the inner housing moves intermediate the viewing window in the outer housing and the barrel so as to obscure the window in the barrel from the user's view.

28. (Previously Presented) An injection device as claimed in claim 1, further comprising means for emitting an audible and/or physical indication to a user that the injection is complete.

29. (Currently Amended) An injection device comprising an outer housing inside which is located:

a barrel for holding a volume of a medicament;

a needle at one end of the barrel, the needle and barrel being such that at least part of the needle is axially moveable in and out of the outer housing but is biased to be normally wholly inside the housing;

a plunger, axially moveable within the barrel;

an inner housing intermediate at least a portion of the outer housing and at least a portion of at least one of the barrel and plunger; and

an energy source in communication with the inner housing,

characterized in that the inner housing is moveable by the energy source between two positions, namely:

a first position in which ~~the inner housing has~~ one or more radially flexible tags formed as part of the inner housing ~~which~~ are in communication with the plunger but not the barrel such that, in use, the plunger is movable axially into the barrel so as to expel medicament through the needle; and

a second position in which said one or more radially flexible tags formed as part of ~~on~~ the inner housing are in communication with neither the plunger nor the barrel such that, in use, the plunger and barrel are able to retract in order to retract the needle into the outer housing.

30. (Currently Amended) An injection device comprising an outer housing adapted to receive:

a barrel for holding a volume of a medicament;  
a needle at one end of the barrel, the needle and barrel being such that at least part of the needle is axially moveable in and out of the outer housing but is biased to be normally wholly inside the housing; and  
a plunger, axially moveable within the barrel,  
wherein the injection device further comprises:  
an inner housing ~~intermediate the outer housing and the barrel and plunger;~~  
and  
an energy source in communication with the inner housing,  
characterized in that the inner housing is moveable by the energy source between three positions, namely  
a first position in which ~~the inner housing has~~ one or more radially flexible tags formed as part of the inner housing are in communication with the barrel such that, in use, the plunger and barrel are movable axially so as to move at least part of the needle out of the outer housing;  
a second position in which ~~the inner housing has~~ one or more radially flexible tags formed as part of the inner housing are in communication with the plunger but not the barrel such that, in use, the plunger is movable axially into the barrel so as to expel medicament through the needle; and  
a third position in which the radially flexible tags ~~[[on]]~~ formed as part of the inner housing are in communication with neither the plunger nor the barrel such that, in use, the plunger and barrel are able to retract in order to retract the needle into the outer housing.

31. (Previously Presented) An injection device as claimed in claim 29 comprising a spring housing intermediate the outer housing and the inner housing.

32. (Canceled)